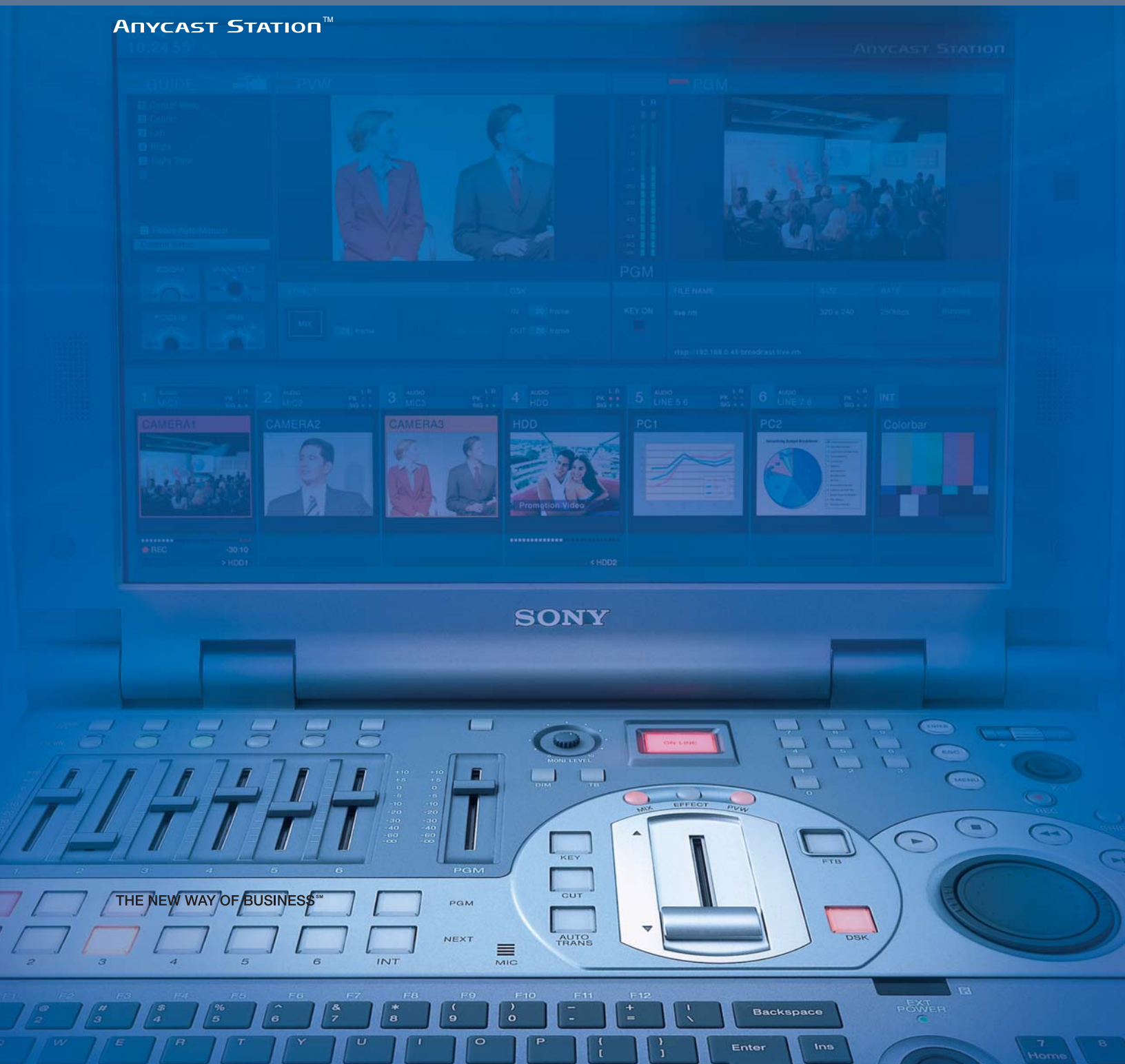
AWS-G500

Live Content Producer

SONY

Anycast Station™



THE NEW WAY OF BUSINESS℠

Anycast Station

Live Content Producer

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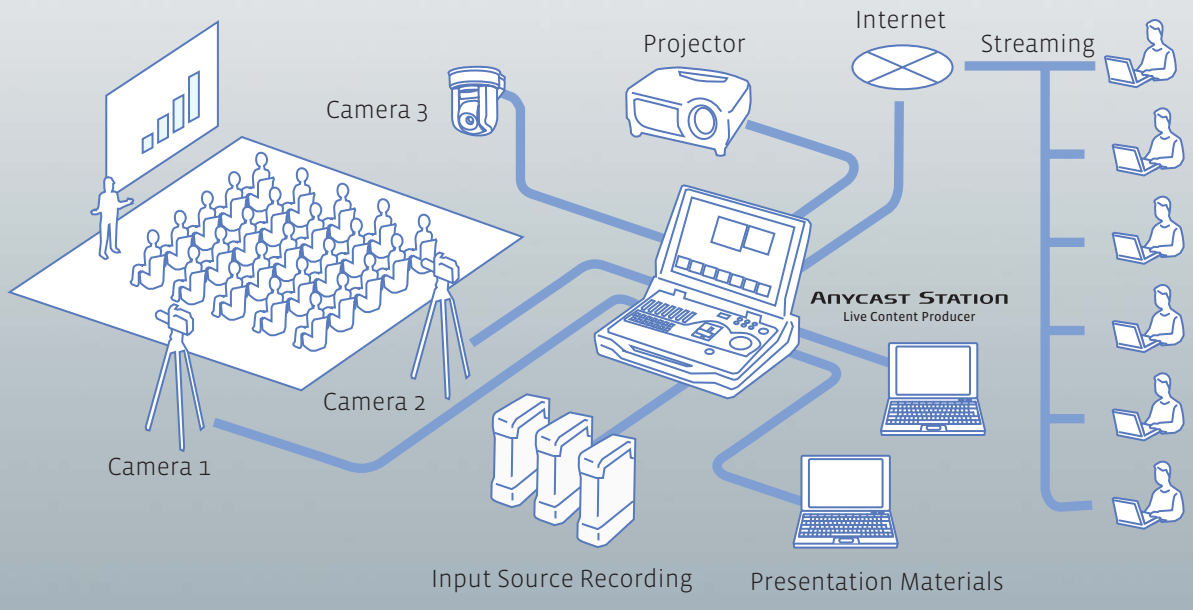
Live Content Producer **AWS-G500**

The Anycast Station™ Live Content Producer is a solution that combines decades of Sony AV expertise together with industry-leading IT technology.
Designed as a powerful content creation tool for live event programming, it is comprised of a high-quality video switcher, an audio mixer, a large LCD display, and a streaming encoder and server – all packed into an attaché case size chassis weighing only about 17 lb. 10 oz (8 kg).

To accommodate today's growing needs to integrate video, audio, and a variety of PC input sources in live events, the Anycast Station system provides a comprehensive set of AV and IT inputs. These include SDI, analog composite, S-Video, DV Input, and balanced analog audio as well as computer RGB input. The unique processing of the Anycast Station system allows live switching between these video and computer sources without the use of external line converters and without degrading picture quality.

When it comes to program delivery, the Anycast Station system is very flexible too. Straight from the Anycast Station system, the user can feed programs to tape or large venue display, store input sources and a PGM output to external hard disk drives, stream the program on the web, or even edit the stored A/V files on a PC. With all these unique features, plus a logical design for ultimate ease of use, the Anycast Station system is a tool that can be used by anyone, anytime, and anywhere – for church productions, product promotions, event and live staging, conferences, seminars, and distance learning. Just connect your sources, turn on the power, and deliver the program.



MAIN FEATURES

All-in-one design

The Anycast Station system comes equipped with a video switcher, an audio mixer, an LCD display, and camera control functions, all packed into a compact attaché case design.

This approach eliminates any external wiring and cumbersome signal adjustments, making setup extremely easy and quick. On the large LCD screen, there are two windows for monitoring the program and preview outputs, together with seven windows to view each individual input source plus one internal still picture source, eliminating the need for many picture monitors. These factors make the Anycast Station system a powerful device for producing live events, virtually anywhere and with a minimum production crew. Despite its compact design, each function of the Anycast Station system provides uncompromising power and quality.

1: **Video Switcher**
Provides:
-1280 x 1024 100-MHz/4:2:2 8-bit processing
-6 primary inputs plus one still picture source
-1 ME with 1 keyer
-1 DSK + 1 fixed station logo

2: **Audio Mixer**
Provides:
-48 kHz/24-bit processing
-6 stereo channel input mixing
-6 channel faders and 1 master fader

3: **Access Buttons**
Pressing an access button calls up the control menus of the associated input to the LCD screen. A variety of video and audio parameter settings can be made.

4: **Mixer Output Controls**
Provides controls for the audio monitor output level, built-in speakers, and headphone output, talkback On/Off, and dimmer On/Off of an intercom. The Audio signal can be monitored between PGM, AUX1, AUX2, and MIX.

5: **On-line Button**
Triggers or stops the following functions.
- Streaming distribution
- Recording of input sources or PGM output to compatible hard disk drives.

6: **Menu Operation/Camera Control**
General menu selection/settings are made using the menu button and jog roller.
This area also provides control functions for compatible Sony Pan/Tilt/Zoom cameras.
The position controller allows Pan/Tilt control of compatible Sony Pan/Tilt/Zoom cameras while the ten keys are for camera position memory store/recall.
VISCA™ control is used to provide Pan, Tilt, Zoom, Iris, Focus and White Balance control functions.

7: **Device Control**
Provides basic and jog/shuttle control functions of external hard disk drives used for playing back video material.
The jog and shuttle dials are also used for focus and zoom control of compatible Sony Pan/Tilt/Zoom cameras.

8: **Talkback Microphone**
Used for talkback purposes. An intercom connector is also provided on the rear panel should the use of an intercom system be preferred.

9: **Wireless Keyboard (Turned Over)**
Used to create still text for superimposition on the program output, type video source names prior to the live event as well as setting up IP addresses for streaming destinations.

A: **Source Viewer**
Displays the thumbnail video of each input source. The windows of the sources selected for PGM out and PVW out are highlighted in red and amber, respectively.

B: **Streaming Display**
Displays the parameters, current server status of the streaming video, and URL of the Anycast Station system user is operating.

C: **PGW Viewer**
Displays the source currently distributed or presented.

D: **PVW Viewer**
Displays the next source selected for output after the transition.

E: **Effect Display**
The currently selected effect pattern such as PinP is indicated with an effect icon. Effect and DSK transition durations are also displayed.

F: **Guide Display**
Displays guides for controlling compatible Sony Pan/Tilt/Zoom cameras such as zoom, pan, tilt, focus, and iris. The camera position memory numbers/names of the camera selected on the 'NEXT' button row are also displayed. Also displays general menu selections and settings.

G: **Audio Level Display and Key On Indicator**
Displays either the audio output levels of PGM, MIX, AUX1, and AUX2, or the status of the key; On/Off.

H: **Built-in Stereo Speakers**

Anycast Station

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Simulated image

Easy and integrated operation

The Anycast Station system makes live event programming as simple as possible. This is because the Anycast Station system requires very little or no technical knowledge of switcher and mixer setup and operations due to its extremely intuitive control surface and large LCD display.

With the Anycast Station system, switching between the desired input signals is an extremely easy task. This is because all input sources, as well as the preview and program outputs, are shown on one large LCD screen – simply select the next desired signal from the 'NEXT' button row and slide the transition fader or hit the 'Cut' button.

The window frames of the input sources chosen for the program and preview outputs are highlighted in the same color as the program and preview window markers. This gives operators complete comfort that the correct inputs have been selected. A variety of preset effect patterns are available for source switching transitions as well as for inserting keys.

What's more, remote control of one or more compatible Sony Pan/Tilt/Zoom cameras is also simple, since the Anycast Station system allows Pan and Tilt adjustments from its position controller, in addition to Iris, Focus, and Zoom control using the jog and shuttle dials.

The Anycast Station system comes with "Text Typing Tool" software, which is controlled via an easy-to-use GUI displayed in full size on the LCD screen. This GUI can be easily toggled between the main GUI of the Anycast Station system. The Text Typing Tool software allows operators to easily generate still text for superimposition on the program output using the DSK or Keyer. In addition, Wipe and Dissolve effects can be used for the overlaying of text. A number of text files can be created and stored in advance for instant recall during the live event, and it is possible to install TrueType fonts from third parties.

Simply put, the Anycast Station Live Content Producer combines creative power and ease of operation in one integrated production system.

Text Typing Tool

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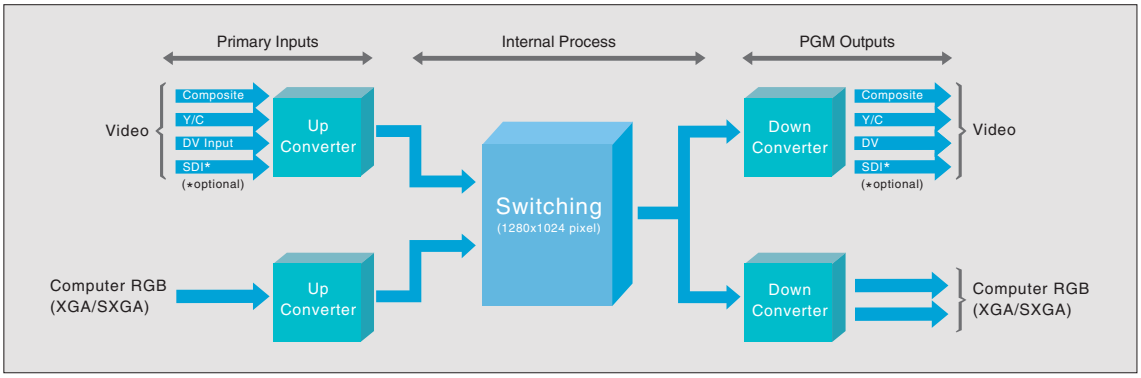
Seamless switching between video and PC sources

In live events, there's no telling what types of signal sources need to be presented or distributed. With the Anycast Station system this dilemma is a thing of the past. The Anycast Station system allows live switching between a variety of signal sources – from standard definition video (Analog composite, S-Video, DV, SDI) to PC images with various resolutions. Two important features make this possible – the sophisticated built-in line converters and the high-resolution internal processing. Each input source supplied to the Anycast Station system is up-converted and processed within a 1280 x 1024 progressive domain to allow switching between sources of different resolutions, while keeping picture degradation to a minimum. The program can be output from a variety of interfaces including Analog composite, S-Video, and SDI for video, and D-Sub 15-pin outputs for projectors and Plasma displays.



Flexible video input configurations

As standard, the Anycast Station system offers the following video and PC inputs. These are provided as interface modules installed in the slots of its rear panel.

Primary inputs 1 to 4: Analog composite, S-Video, DV

Primary inputs 5 to 6: RGB (XGA, SXGA)

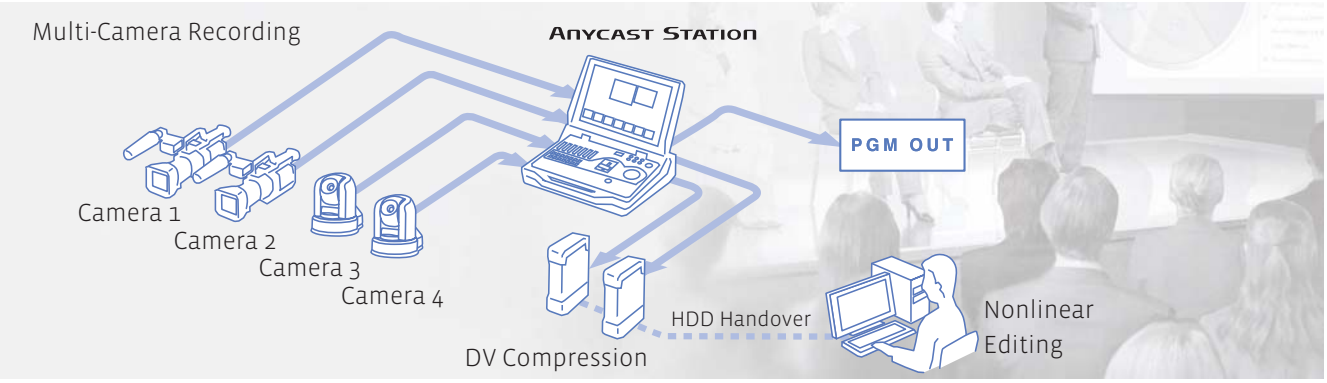
Should a different input configuration be required, the interface modules such as BKAW-580 for SDI input and output are provided as optional accessories, allowing users to configure the system exactly as required. What's more, the Anycast Station system allows each input on these modules to be assigned to any one of the primary inputs via simple menu settings.

Rear Panel Connectors

Left Side Panel Connectors

Recording to hard disk drives

During a live event, each signal source supplied to the Anycast Station system's primary inputs and PGM output can be recorded to external third-party hard disk drive equipped with an IEEE1394 interface.
The Anycast Station system allows synchronized recording of two primary input sources to an external third-party hard disk drive* connected to its rear panel. This means that with only two hard disk drives, four primary inputs can be recorded them as DV files. What's more, the PGM output of the Anycast Station system can also be recorded.
After recording, the DV files can be played back on a PC by connecting the hard disk drives to it, as well as on the Anycast Station system. In addition, the Anycast Station system has the capability to automatically create an EDL (Edit Decision List) based on its switching information, which allows users to edit DV files on a PC very efficiently.



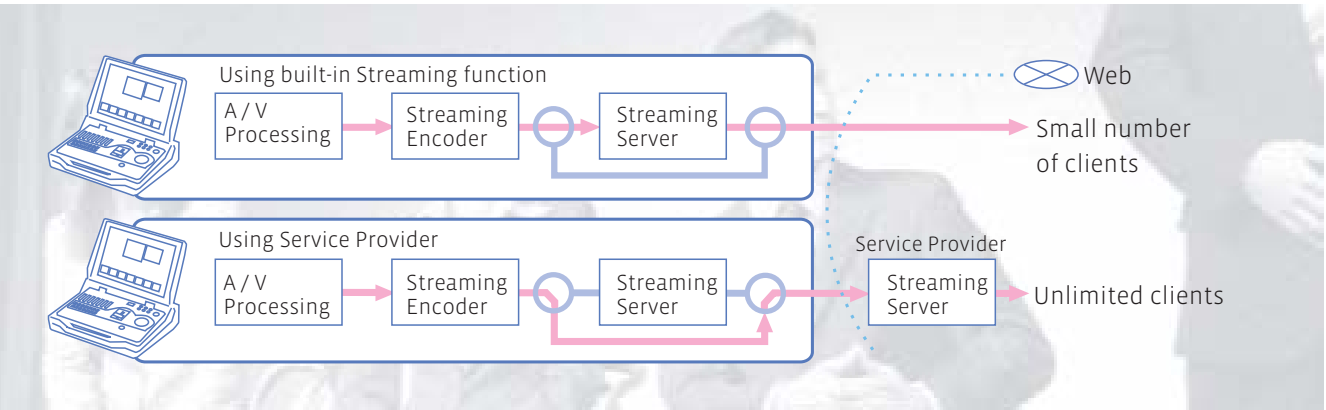
*Please contact your nearest Sony office or authorized dealer for compatible hard disk drives and their conditions for use in recording of two primary input sources.

Streaming Encoder and Streaming Server

The Anycast Station system provides a built-in Streaming Encoder and Streaming Server as a standard feature. This function allows the high-quality program output of the Anycast Station system to be streamed in real-time – with minimum degradation and through very simple procedures – for distribution over the Internet, LANs, or leased lines. When the number of clients is relatively small, the built-in Streaming Server function allows the streamed video to be distributed right from the Anycast Station system without the need for an external streaming server connection. The following streaming functions are provided:

Codec: Real Video and audio encoders
Streaming server: Helix™ DNA Server
Bit rate: 35 to 700 kbps
Resolution: 160 x 120, 240 x 180, 320 x 240

Since the built-in Streaming Encoder also allows connection to external streaming servers, the live event can further be distributed to hundreds or even thousands of viewers.



APPLICATIONS

A range of features make the Anycast Station system suitable for virtually limitless applications. The following are typical examples.

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-Church production

-Product promotion

-Corporate videos

-Event staging

-Live stages/music clip creation

-Conferences/seminars

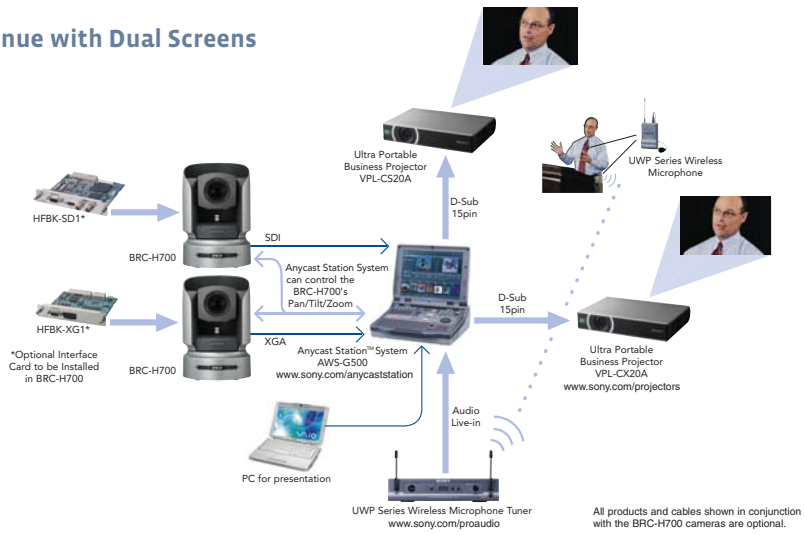
-Distance learning

Example: Large projection application

The Anycast Station system is a convenient live content creation system that allows easy integration of PC images, such as Microsoft PowerPoint® slides and Excel® sheets, into live video programming. The Anycast Station system is designed such that PC image quality and/or video quality are not degraded during source switching, keeping the final program output quality at its best. Since image quality is important when displaying presentations on large projection systems, the Anycast Station system serves as a powerful tool in such applications. The preview monitor on the LCD screen further assists in selecting the next source to be put on screen, allowing for a very smooth, seamless presentation.

What's more, by preparing video clips to be used in the presentation on third-party hard disk drives, operation of the entire presentation becomes much smoother, especially compared to using conventional tape-based playback devices. And, of course, using the built-in streaming capability or signing up with a streaming service provider allows the impressive screen projection to be distributed across the web, delivering the message wherever desired.

Live Event Venue with Dual Screens



The BRC-H700 can be remotely controlled (pan/tilt/zoom) by the Anycast Station™ system (AWS-G500), and up to six presets can be registered. If you are considering migration to HD in the future, but are still working in an SD environment, you can use the HFBK-SD1 for SD output or the HFBK-XG1 for XGA output to the Anycast Station system for now. The BRC-H700 camera, along with the portable Anycast Station system, the ultra portable business projector VPL-CS20/CX20, VAIO® Series PC, and the UWP Series Wireless Microphones enable you to run high quality live presentations virtually hassle-free, with less people.

Optional Accessories

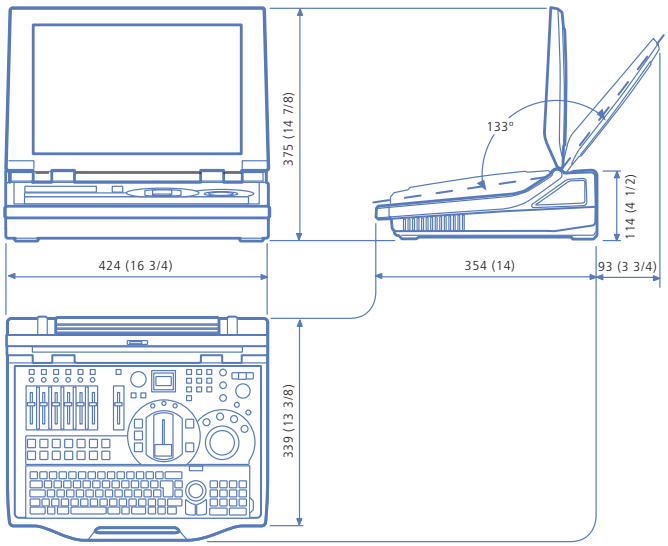
BKAW-550
PC Video Interface Module

BKAW-570
SD Video Interface Module

BKAW-580
Serial Digital Interface Module

LC-AWSBP
Soft Carrying Case

Dimensions



unit : mm (inches)

FUNCTIONS

Video Switcher	
Configuration	6 Primary inputs and 1 Internal Still Picture 1 M/E + 1 Keyer + DSK + LOGO
Input Level Control	Lum Level / Lum Offset(Setup) / Chroma Level / Hue (NTSC only)
Video Effect	Mix and 16 patterns of Wipe P in P: 3 patterns (Large, Medium, and Small) Fade to Black
Key Source	Keyer: Input Signals or Internal Still Picture DSK: Internal Still Picture LOGO: Internal Still Picture
Key Type	Keyer: Luminance Key / Alpha Channel DSK:Luminance Key / Alpha Channel LOGO: Luminance Key / Alpha Channel
Internal Still Picture	Matte, Color Bar (SMPTE/EBU) Import Picture Format: BMP, TIFF, TGA, JPG
Picture Aspect	4 : 3 / 16:9* *Please contact your nearest Sony office or authorized dealer for availability.

Audio Mixer	
Configuration	Input: 8 Monaural inputs or DV Stereo Audio Mixing: 6 Stereo Mixing Output: PGM (Stereo) / MIX (Stereo) / AUX1 / AUX2
Input Control	Input Trim: -15dB to +15dB Filter: High Cut 8kHz, Low Cut 100Hz EQ: 3 Band Parametric Equalizer Limiter: 100:1 Compressor: 2:1 Pan
Tone Signal	100Hz, 440Hz, 1kHz, 10kHz

Camera Control	
Recommended Camera	BRC-300 / EVI-D100 / EVI-D70 / BRC-H700 BRC-300P / EVI-D100P / EVI-D70P
Max. Controllable cameras	Up to 6 Cameras
Snap Shot Memory	Memory: 6 Items: Pan / Tilt / Zoom / Focus / Iris
Control Tool	NEXT Button / Pointer / Jog Shuttle Dial

Streaming	
Streaming Control	Online Button for starting Streaming

Text Typing Tool	
Resolution	1280x 960 RGB 8 bit
Objects	Text, Line, Background Color
Modification	Bold, Italic, Underline Edge Border
Font	Three English True Type Font
Import format	True Type Fonts (.ttf)
Export format	TIFF, TGA
Color Tool	RGB/HSL Slider type, Color Picker type
Others	Kerning, Spacing, Centering, Ordering, Safe Area *Please contact your nearest Sony office or authorized dealer for availability of other langages.

Job Management	
Save/Load	Setup data can be stored on or recalled from a built-in hard disk drive.
Import/Export	Setup data can be exported to or imported from a Memory Stick® media or USB flash memory device.

SPECIFICATIONS

General	
Model	AWS-G500
Power Requirements	AC 100-240 V, 50/60 Hz
Operating Voltage	AC 90-260 V, 47/63 Hz
Power Consumption	160 W
Operating Temperature	42 to 104 ˚F (5 to 40 ˚C)
Dimensions (W x H x D)	16 3/4 x 4 1/2 x 14 inches (424 x 114 x 354 mm)
Weight	Approximately 17 lb 10 oz (8.0 kg)

Video Signals	
VIDEO INPUTS (in ex-factory configuration)	
Composite	BNC Type x 4 Video: 1.0 Vp-p, 75 Ω, Sync negative
S-Video	DIN Type x 4 Y: 1.0 Vp-p, 75 Ω, Sync negative C: 0.286 Vp-p at burst, 75 Ω (NTSC) C: 0.3 Vp-p at burst, 75 Ω (PAL)
RGB	D-Sub Shrink 15pin Type x2 (Female)
VIDEO OUTPUTS	
Composite	BNC Type x1 Video: 1.0 Vp-p, 75 Ω, Sync negative
S-Video	DIN Type x 1 Y: 1.0 Vp-p, 75 Ω, Sync negative C: 0.286 Vp-p at burst, 75 Ω (NTSC) C: 0.3 Vp-p at burst, 75 Ω (PAL)
RGB	D-Sub Shrink 15pin Type x2 (Female)
REF OUT	BNC Type x 2 Sync: 0.286 Vp-p, 75 Ω, Sync negative (NTSC) Sync: 0.3 Vp-p, 75 Ω, Sync negative (PAL) C: 0.286 Vp-p at burst, 75 Ω (NTSC) C: 0.3 Vp-p at burst, 75 Ω (PAL)
VIDEO INPUTS/OUTPUTS	
DV IN/OUT	IEEE 1394 6pinx4 IEC 61883-2 equiv.
Video Signals Performance	
Quantization and Sampling Frequency(SD Video)	8 bit Y: 13.5MHz R-Y/B-Y: 6.75MHz
Frequency Response	NTSC: 0 to 4.2MHz +1dB - 3dB PAL: 0 to 4.8MHz +1dB - 3dB
S/N Ratio	50 dB or more (Composite Y)
Y/C Delay	Less than 50ns
REF OUT Frequency Accuracy	Within 50 ppm
RGB Preset Signals	XGA 60Hz (VESA DMT1024x768 60Hz) XGA 75Hz (VESA DMT1024x768 75Hz) SXGA 60Hz (VESA DMT1280x1024 60Hz) SXGA 75Hz (VESA DMT1280x1024 75Hz) Input Only

HDD Port	
i.LINK* (in ex-factory configuration)	IEEE 1394 S400 6pin Type x 2 HDD IF: SBP2
HDD Recording / Playback	
Codec	DV
Recording Format	AVI (DV-AVI)
Recording Source	Video: SD Video Inputs / PGM Audio: Inputs(Stereo) / PGM Audio(Stereo)

SUPPLIED ACCESSORIES	
Operating Instructions	
Keyboard	85 keys + Pointer Infrared communication Powered from AWS-G500: +5 V Battery operation: CR2032 or 2032H
Cell Battery	CR2032 x 2
Pin to BNC Connector	x4

Audio Signals	
AUDIO INPUTS	
Analog Inputs 1-2	XLR/TRS Combo Type x 2 Ref. Level: +4 dBu, -20 dBu, -44 dBu / Mic. Power: +48 V
Analog Inputs 3-6	TRS Type (Balanced) x 4 Ref. Level: +4 dBu, -20 dBu, -44 dBu
Analog Inputs 7-8	Pin x 2, Ref. Level: -10 dBu
AUDIO OUTPUTS	
PGM OUT	TRS Type x 2, Ref.: +4 dBu, Impedance: 150 Ω
MIX OUT	Pin Type x 2, Ref.: -10 dBu, Impedance: 470 Ω
AUX OUT	TRS Type x 2, Ref.: +4 dBu, Impedance: 150 Ω
MONITOR OUT	TRS Type x 2, Ref.: +4 dBu, Impedance: 150 Ω
HEADPHONES	1/4" Stereo Phone Jack Type x 2 70mW x 2, Impedance: 47 Ω
INTERCOM	D-Sub 9-pin Type (Female) / Original Parallel I/O
Audio Signals Performance	
Sampling Frequency	48kHz x128 over sampling (A/D)48kHz/32kHz(DV IN)
Quantization	24 bit (A/D, D/A), 32/40bit (DSP)
Frequency Response (MIC/LINE)	20Hz to 20kHz +0.5dB to - 2dB
THD (LINE -10dBu 1kHz)	0.1% or less
Dynamic Range	90 dB or more

Other Interfaces	
NETWORK	RJ-45 Type x 1, 10 base-T/100 base-TX
USB	USB A Type x 2, USB equiv.
RGB(GUI)	D-Sub Shrink 15 pin (Female), 1280 x 800 60 Hz
REMOTE	D-Sub 9 pin (Male), RS-232C
FACTORY USE	D-Sub 15 pin (Male), Original Parallel I/O Up to five camera tally outputs are available.
MEMORY STICK	Memory Stick™ Slot / Memory Stick Pro/Pro Duo/ are not supported.
VISCA OUT	DIN 8pin Type x 1 / Sony VISCA camera commands are supported.
LCD	15.4"High Brightness LCD, 1280 x 800 60 Hz
Speaker	Built-In Speaker x 2 Size: 20x40(mm)
Streaming Performance	
Codec	Real Video 9, Real Audio 8
Streaming Server	Helix DNA Server
Protocol	rtsp (Streaming), UDP, TCP, HTTP (Transport)
Audio Sampling Frequency	44.1kHz
Resolution	160x120, 240x180, 320x240
Bit Rate (Video+Audio)	Compression Scheme: Variable Bit Rate Preference: Average (Max. Bit Rate) 34kbps(56kbps) / 50kbps(64kbps) / 150kbps(180kbps) / 225kbps(256kbps) / 350kbps(700kbps) / 450kbps(900kbps) / 700kbps(1400kbps)
Frame Rate	15fps (Typical) * * The Anycast Station automatically selects the frame rate according to bit rate and picture resolution. Therefore the frame rate cannot be manually selected.
Distribution Delay	10 seconds or more (inc. player's minimum buffering delay)
Client Number	34, 50, 150kbps: Up to 20 / 225, 350kbps: Up to 10 / 450, 700kbps: Up to 5 (This number is influenced by network condition.)

OPTIONAL ACCESSORIES	
BKAW-550 PC Video Interface Module	
RGB	D-Sub Shrink 15pin Type x 2 (Female)
BKAW-570 SD Video Interface Module	
Composite	BNC Type x 2 / Video: 1.0 Vp-p, 75 Ω, Sync negative
S-Video	DIN Type x 2 / Y: 1.0 Vp-p, 75 Ω, Sync negative / C: 0.286 Vp-p at burst, 75 Ω (NTSC) / C: 0.3 Vp-p at burst, 75 Ω (PAL)
i.LINK	IEEE 1394 S400 6pin Type x 2 / HDD IF: SBP2
BKAW-580 Serial Digital Interface Module	
SDI IN	BNC Type x 2/ Video: 800m Vp-p (75 Ω) / SMPTE259M-C, ITU-R656 compliant / Audio sampling rate: 20 bit 48 kHz 2 channels (channel 1 and 2, or 3 and 4) /SMPTE272M-A compliant
SDI OUT	BNC Type x 1/ Video: 800m Vp-p (75 Ω) / SMPTE259M-C, ITU-R656 compliant /Audio sampling rate: 20 bit 48 kHz 2 channels (channel 1 and 2) /SMPTE272M-A compliant
i.LINK	IEEE 1394 S400 6pin Type x 2 / HDD IF: SBP2

* i.LINK is a Sony trademark used only to designate that a product is equipped with an IEEE1394 connector. All products with an i.LINK connector may not communicate with each other. Please refer to the documentation that comes with any device having an i.LINK connector for information on compatibility, operating conditions, and proper connection.

ANYCAST STATION

www.sony.com/AnycastStation

Helix DNA

SONY

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